

NOVEMBER/DECEMBER 2025

**23USCA33 — PROBLEM SOLVING  
TECHNIQUES**

Time : Three hours

Maximum : 75 marks



SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

How Applications Software differ from System Software?

2. Name two types of Internal Memory.
3. What is meant by the Machine Language?
4. Define flowchart with example.
5. Differentiate between Pre-test and Post-test Loops.
6. Write the syntax of For Statement.
7. How to declare two-dimensional Arrays?
8. State the advantages of using Arrays.



9. Define: Scope of Variable.

10. Write any four Built in-Functions.

SECTION B — ( $5 \times 5 = 25$  marks)

Answer ALL questions.

11. (a) Discuss about the Anatomy of Computer

Or

(b) Enlist the Features of good Programming Language.

12. (a) Enumerate the Pros and Cons of Flowcharts.

Or

(b) Write the Pseudo Code to find the Maximum of Numbers.

13. (a) Exemplify the different Logical Operators.

Or

(b) Narrate the applications of Selection Structures.

14. (a) Discuss briefly about Numeric and Character Based Data.

Or

(b) How to declare and initialize One Dimensional Array? Explain.

15. (a) Explain the importance of Sub Programs.

Or

(b) Write short notes on Sequential Files.

SECTION C — ( $3 \times 10 = 30$  marks)

Answer any THREE questions.

16. Expound the importance of various Secondary Storage Devices.

17. Describe the following:

(a) Benefits and drawbacks of Algorithm

(b) Command Lines and Types of Errors.

18. Illustrate the Counter Controlled Loops with suitable example.

19. How to represent Strings as Arrays of Characters? Explain with example.

20. Explicate data flow diagrams with its definition, symbols and types.

